OIPE
SEP 26 2003
PATENT & TRADEMARK OFFICE

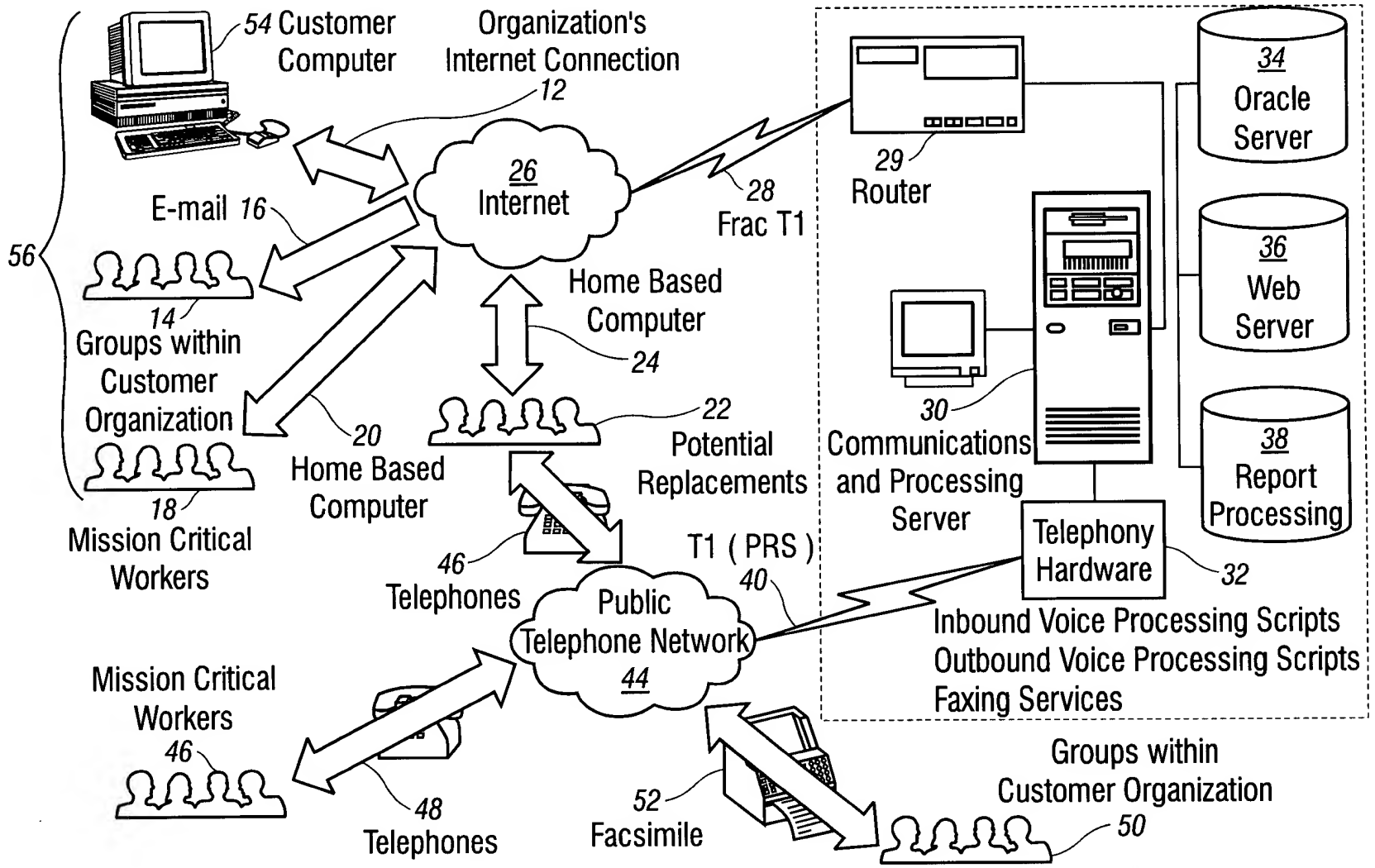


*FIG. 1*

OIPE JC99 SEP 26 2003 PATENT & TRADEMARK OFFICE



## Data Flow Process and Interface

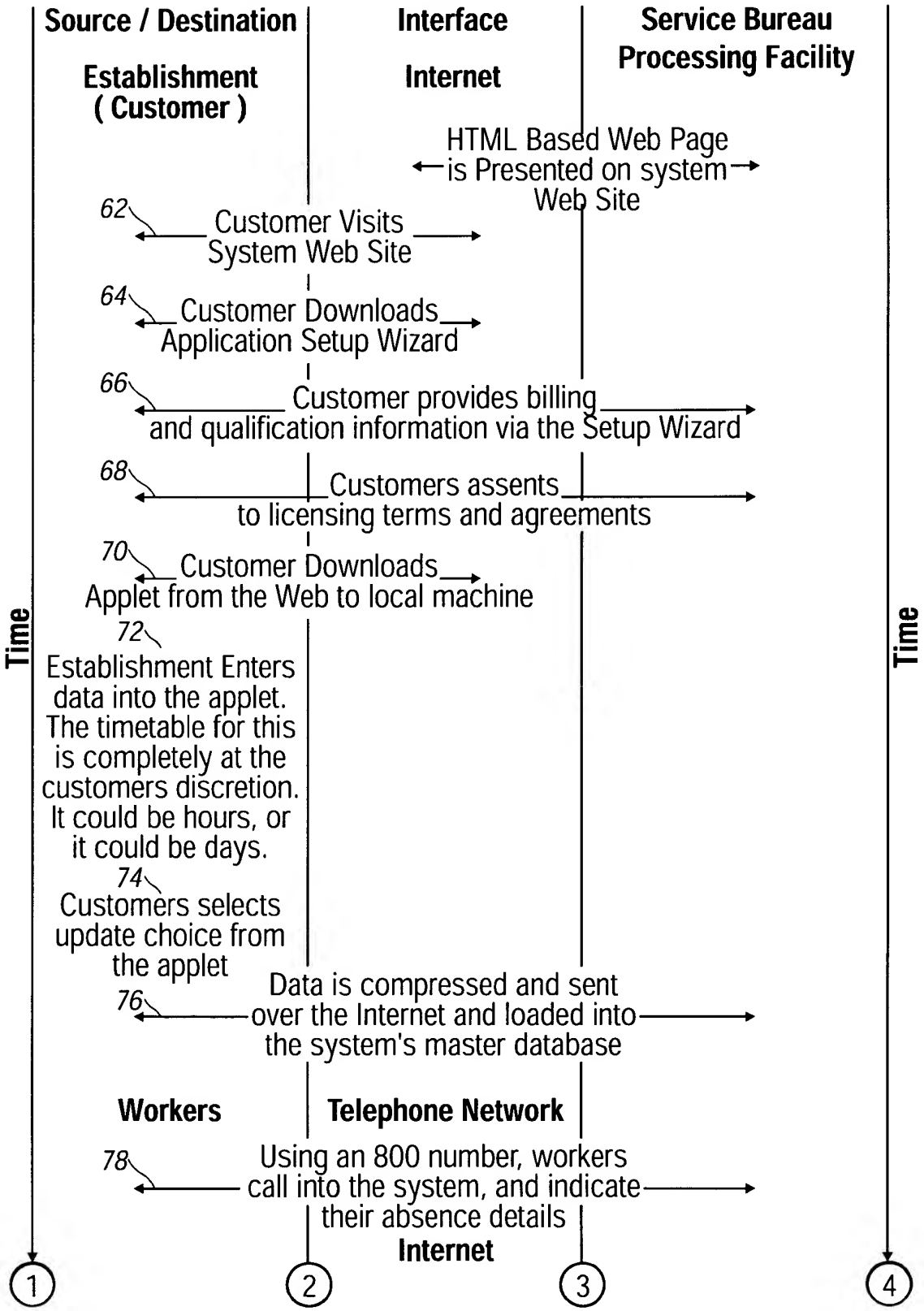


FIG. 2 ( 1 of 2 )

OIPE
SEP 26 2003
PATENT & TRADEMARK OFFICE



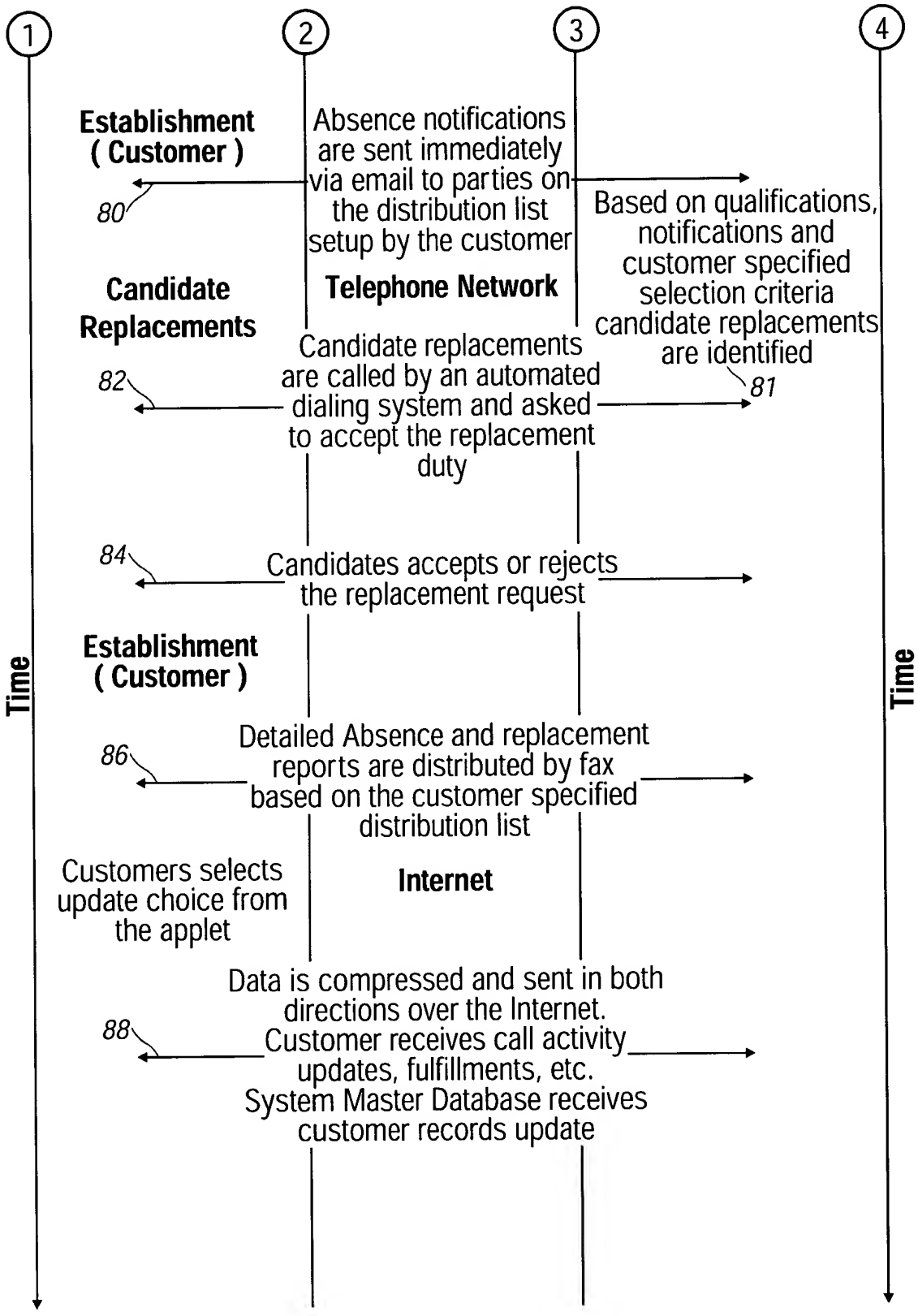


FIG. 2 ( 2 of 2 )

OIPE
SEP 26 2003
PATENT & TRADEMARK OFFICE



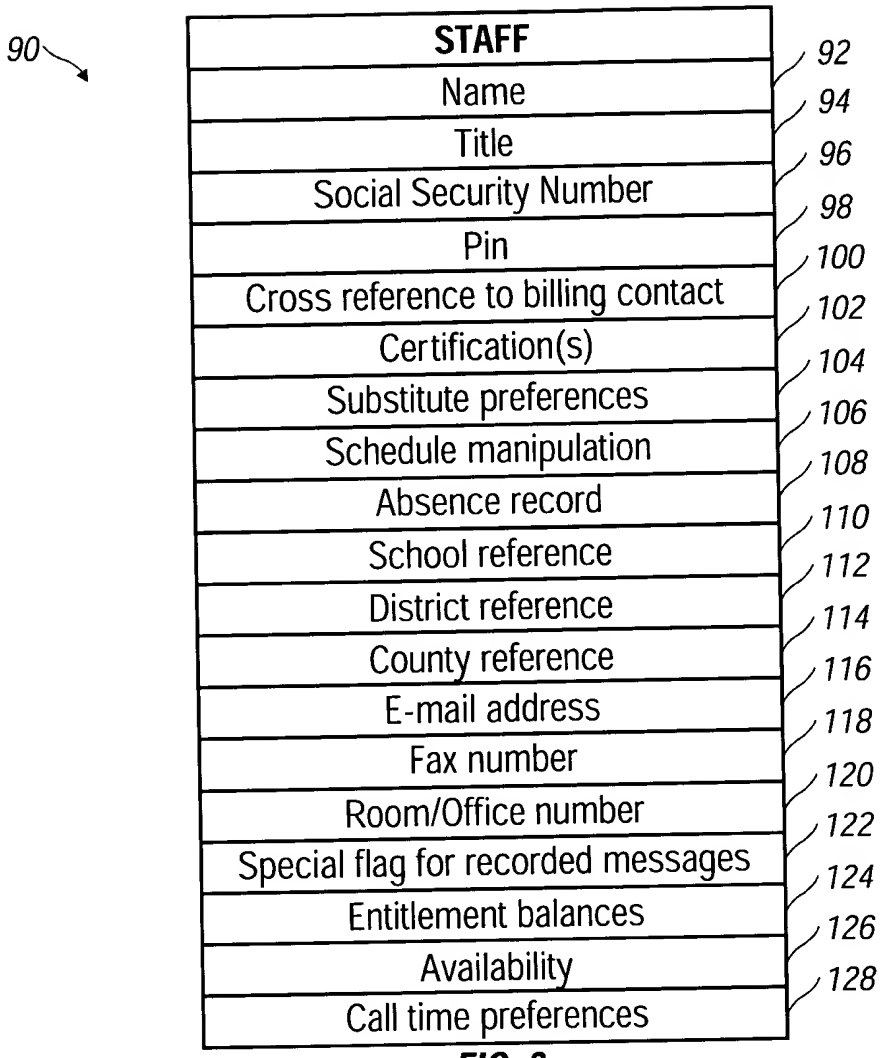


FIG. 3

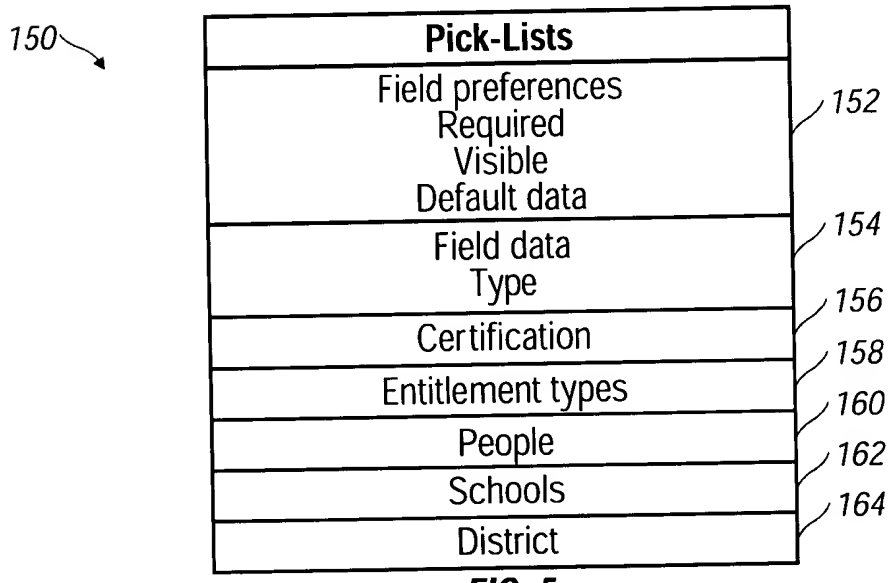


FIG. 5

OIPE
SEP 26 2003
PATENT & TRADEMARK OFFICE



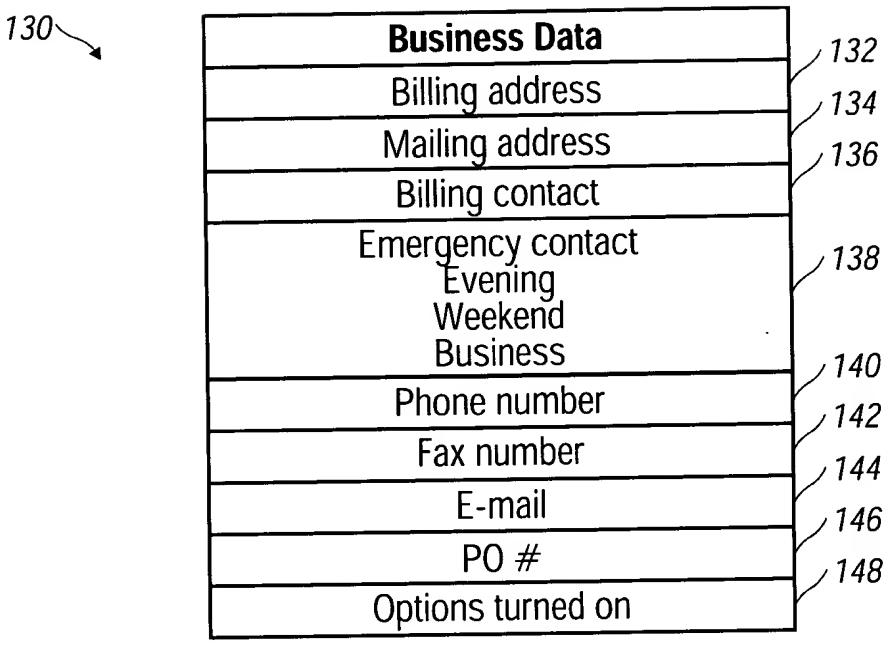


*FIG. 4*

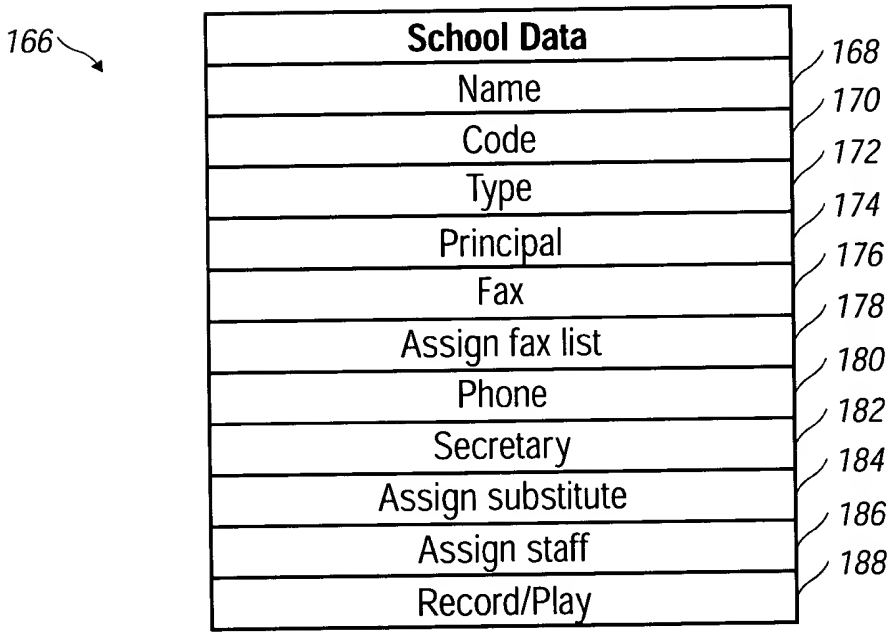


*FIG. 6*

SEP 26 2003
PATENT & TRADEMARK



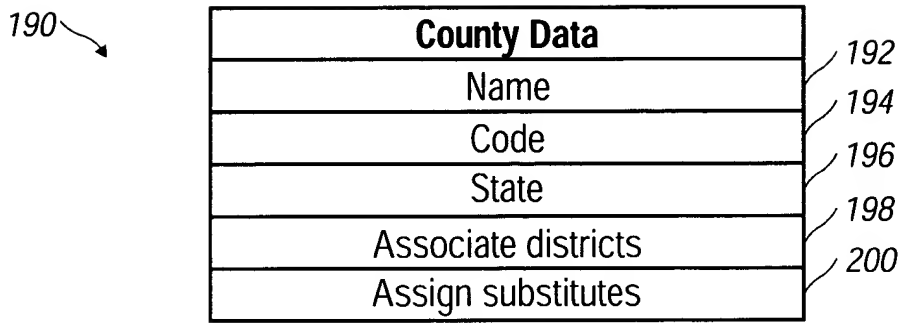


FIG. 7

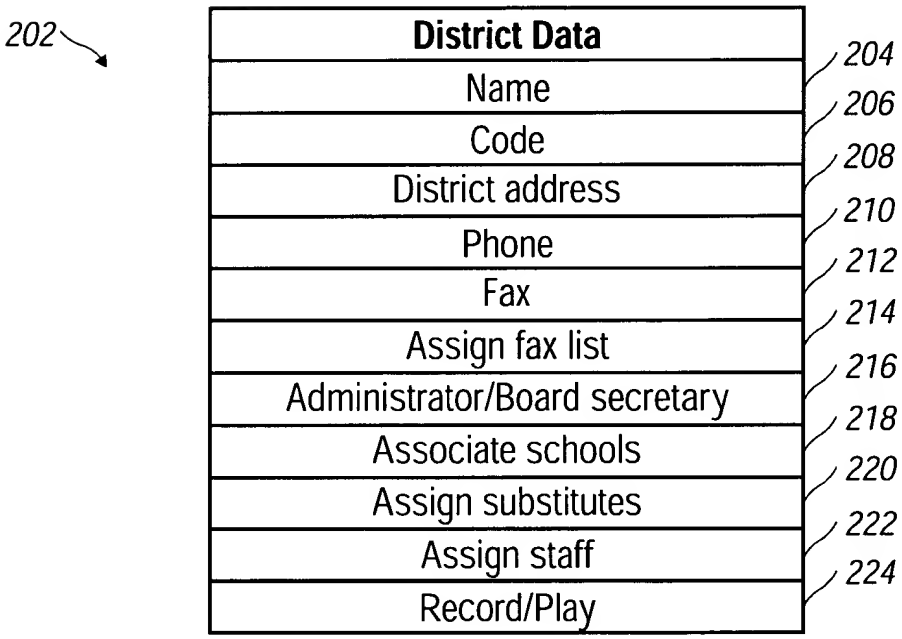


FIG. 8

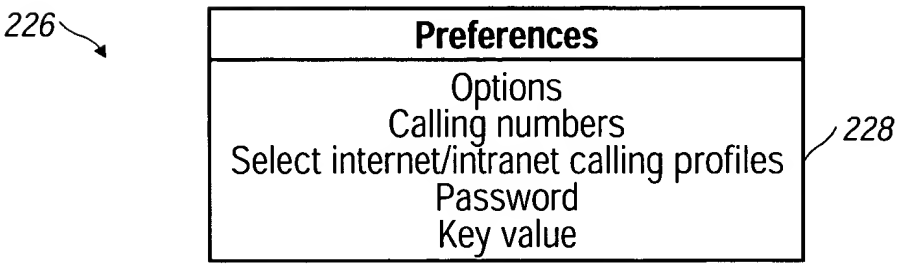


FIG. 9

OIPE SEP 26 2003 PATENT & TRADEMARK OFFICE



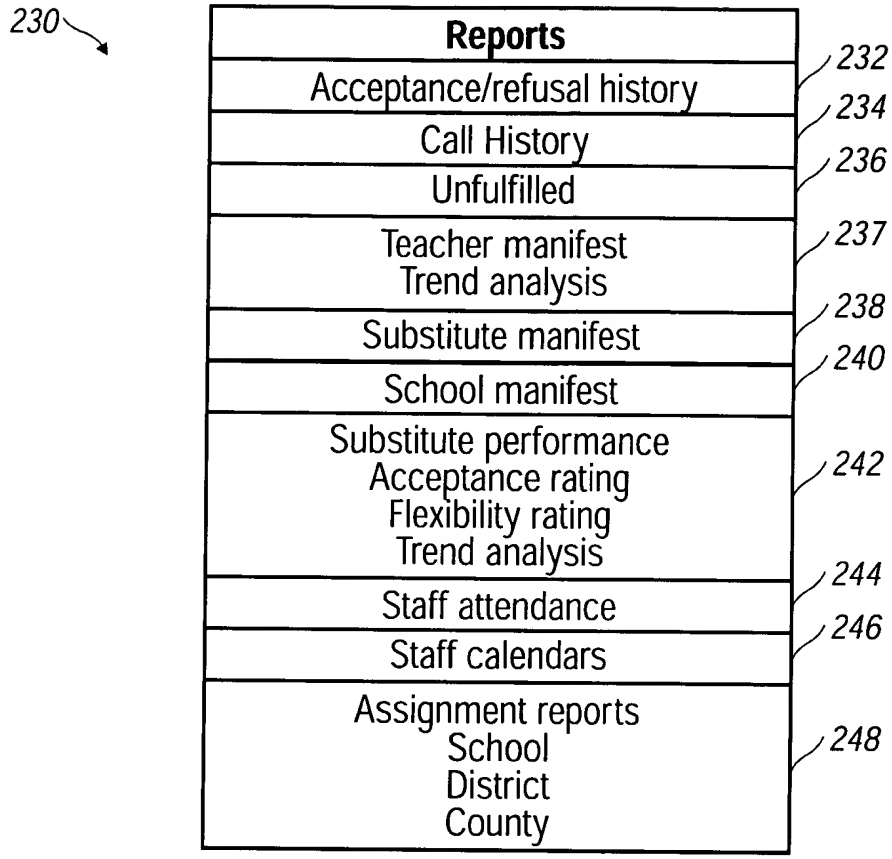


*FIG. 10*

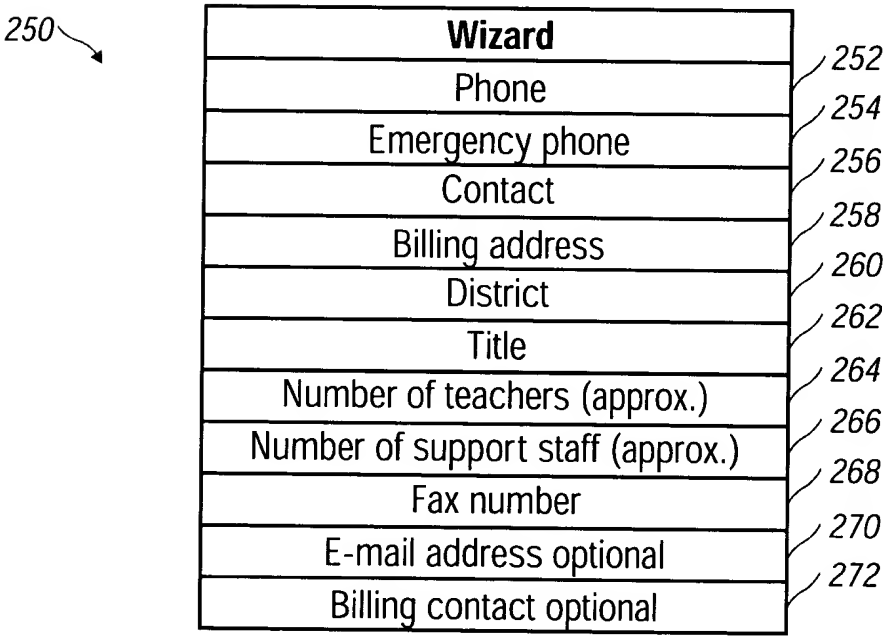


*FIG. 11*

OIPE JC98 SEP 26 2003 PATENT & TRADEMARK



**ABSENTEE REPORT**

**Date: 1/8/98** **Time: 14:40:08**

276

| Name | Social Security # | Phone # | Title | Time | Location |
|---|---|---|---|---|---|
| Smith, John, T. | 005-75-2243 | (609)-555-1111 | Social Studies | 14:39:50 | Howard |
| | Date: | 1/8/98 | | | |
| | Type: | Sick | | | |
| | F/H Day: | Half Day/PM | | | |

**SUBSTITUTE ASSIGNMENT REPORT**

**Date: 1/8/98** **Time: 17:08**

278

| | |
|---|---|
| Name: Smith, John, T. | SSN: 005-75-2243 |
| Title: Social Studies gr 8 | School ID: 011 |
| Location: Howard | School: 50 South School Street |
| Substitute Information | |
| Name: Smith, Charles | SSN: 005-76-2214 |
| Contact Date: 1/8/98 | Time: 17:06 |

**CALL HISTORY REPORT**

**Date: 1/8/98** **Time: 17:08**

279

Name: Smith, John, T. SSN: 005-75-2243

| | | | | | |
|---|---|---|---|---|---|
| Date: 1/8/98 | Time: 17:04 | Line: Answer | Status: No Contact | Sub: Smith, Mark, C. |
| Date: 1/8/98 | Time: 17:05 | Line: Answer | Status: Rejected | Sub: Jones, Pat, B. |
| Date: 1/8/98 | Time: 17:06 | Line: Answer | Status: Accepted | Sub: Smith, Charles D. |

**UNFULFILLED SUBSTITUTE ASSIGNMENT REPORT**

**Date: 1/8/98** **Time: 19:10**

280

| | |
|---|---|
| Name: Hitchens, Jack, R. | SSN: 008-73-2278 |
| Title: English gr 11 | School ID: 012 |
| Location: Blair | School: 123 South Main Street |

FIG. 12

OIPE JC98 SEP 26 2003 PATENT & TRADEMARK OFFICE



| States | Events | | | | | |
|---|---|---|---|---|---|---|
| ST = State Transition | Start | Receive a call | Receive Valid Input | Receive Invalid Input | Timeout | Max Retries Reached |
| Telephony Application | | | | | | |
| Teacher Call-in | | | | | | |
| 281 Initial | Prompt for SS Number | Take phone offhook; Generate "Start" Event | ST: MainMenu | ST: ErrorState | ST: Hangup | N/A |
| 282 MainMenu | "1" Record Absence; "2" Listen to Entitlement Day Balances; "3" Special Instructions | N/A | "1" Pressed ST: Whenstep 1; "2" Pressed, Entitlements | Play Error Message; Generat "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 283 Whenstep 1 | "1" Today; "2" Another Day | N/A | "1" ST: Shift; "2" ST: WhenAnotherDay | Play Error Message; Generate "Start "Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 284 WhenAnotherDay | Prompt for day of the month followed by the "#" sign | N/A | ST: Shift | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 285 Shift | "1" Full Day; "2" Half day AM; "3" Half day PM; | N/A | ST: Absence Type or if required ST: StartTime | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 286 StartTime | Prompt for a military time | N/A | ST: Absence Type | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 287 Absence Type | List Valid Absence Types from database | N/A | ST: ConfirmAbsence or if required ST: RecordInstructions | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 288 RecordInstructions | Play instructions for recording a message | N/A | ST: ConfirmAbsence | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |

1 2 3 4 5 6 7 8

FIG. 13A (1 of 2)

OIPE
SEP 26 2003
PATENT & TRADEMARK OFFICE



| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 289 | ConfirmAbsence | Replay contents of absence, prompt user to comfirm; | N/A | "1" Pressed, ST: CheckComplete; "2" Pressed. ST: WhenAnotherDay | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye | |
| 290 | CheckComplete | Press "1" Complete call and get confirmation number; "2" Enter an additional absence day; | N/A | "1" Pressed, ST: Goodbye; "2" Pressed. ST: WhenAnotherDay | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye | |
| 291 | Entitlements | List Entitlement Day Balances, ST: MainMenu | N/A | N/A | N/A | N/A | N/A | |
| 292 | ErrorState | Play standard error message; ST: Goodbye | N/A | N/A | N/A | N/A | N/A | |
| 293 | Hangup | Hangup Phone ST: End | N/A | N/A | N/A | N/A | N/A | |
| 294 | Goodbye | Play goodbye message; ST: Hangup | N/A | N/A | N/A | N/A | N/A | |

FIG. 13A (2 of 2)

U.S. PATENT & TRADEMARK OFFICE
SEP 26 2003
OIPE



| States | Events | | | | | |
|---|---|---|---|---|---|---|
| ST = State Transition | Start | Receive a call | Receive Valid Input | Receive Invalid Input | Timeout | Max Retries Reached |
| School Administration Call-in | | | | | | |
| 295 MainMenu | Press "1" School Menu; Press "2" Entitlement Types Menu | N/A | "1" Pressed ST: RecordSchoolMenu; "2" Pressed ST: RecordEntTypesMenu | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 296 RecordSchoolMenu | Prompt for valid School Recording ID | N/A | ST: RecordSchool, or if "#" pressed ST: MainMenu | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 297 RecordSchool | Play existing recording, if exists then prompt "1" to record new prompt, "#" to return to School Menu | N/A | "1" Pressed, record/verify prompt, ST: RecordSchoolMenu;"#" ST: RecordSchoolMenu | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 298 RecordEntTypesMenu | Prompt for valid Entitlement Type Recording ID | N/A | ST: RecordEntTypes, or if "#" pressed ST: MainMenu | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 299 RecordEntTypes | Play existing recording, if exists then prompt "1" to record new prompt, "#" to return to Entitlement Menu | N/A | "1" Pressed, record/verify prompt, ST: RecordEntTypesMenu; "#" ST: RecordEntTypesMenu | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 300 ErrorState | Play standard error message; ST: Goodbye | N/A | N/A | N/A | N/A | N/A |
| 301 Goodbye | Thank caller for using system; ST: Hangup: | N/A | N/A | N/A | N/A | N/A |
| 302 Hangup | Hangup Phone ST: End | N/A | N/A | N/A | N/A | N/A |

FIG. 13B

JC98 OIPE SEP 26 2003 PATENT & TRADEMARK OFFICE



| | States | Events | | | | | |
|---|---|---|---|---|---|---|---|
| | ST = State Transition | Start | Receive a call | Receive Valid Input | Receive Invalid Input | Timeout | Max Retries Reached |
| | FrontLine Administration Call-in | | | | | | |
| 303 | RecordFilesMenu | Prompt for the recording ID of the message file | N/A | ST: RecordFiles | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 304 | RecordFiles | Play existing recording, if exists then prompt "1" to Record new prompt, "#" to return to Record Files Menu | N/A | "1" Pressed, record/verify prompt, ST: RecordFiles; "#" ST: RecordFiles | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 305 | ErrorState | Play standard error message; ST: Goodbye | N/A | N/A | N/A | N/A | N/A |
| 306 | Goodbye | Thank caller for using system; ST: Hangup: | N/A | N/A | N/A | N/A | N/A |
| 307 | Hangup | Hangup Phone ST: End | N/A | N/A | N/A | N/A | N/A |

FIG. 13C

OIPE JC98 SEP 26 2003 PATENT & TRADEMARK OFFICE



| States | Events | | | | | |
|---|---|---|---|---|---|---|
| ST = State Transition | Start | Receive a call | Receive Valid Input | Receive Invalid Input | Timeout | Max Retries Reached |
| Substitute Call-out | | | | | | |
| 308 MakeTheCall | Dial the telephone number; ST: CallAnalysis | N/A | N/A | N/A | N/A | N/A |
| 309 CallAnalysis | Determine how the call was or was not answered | N/A | Person Answers; ST: Identify | Person does not answer; | N/A | N/A |
| 310 Identify | Prompt for SS Number or PIN Number | N/A | ST: PresentRequest | Generate "Start" Event | N/A | ST: Goodbye |
| 311 PresentRequest | Play request, prompt substitute to "1"Replay; "2"Accept, "3"Reject | N/A | "1"Replay, Generate Start Event; "2" ST: AcceptRequest; "3" ST: RejectRequest | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 312 RejectRequest | Reject w/No more calls; "2"Reject allowing for additional calls | N/A | ST: Goodbye | Play Error Message; Generate "Start" Event | Play Error Message; Generate "Start" Event | ST: Goodbye |
| 313 AcceptRequest | Play confirmation number; ST: Goodbye | N/A | N/A | N/A | N/A | N/A |
| 314 ErrorState | Play standard error message; ST: Goodbye | N/A | N/A | N/A | N/A | N/A |
| 315 Goodbye | Thank caller for using system; ST: Hangup: | N/A | N/A | N/A | N/A | N/A |
| 316 Hangup | Hangup Phone ST: End | N/A | N/A | N/A | N/A | N/A |

FIG. 13D

JC99 : 09/66
SEP 26 2003
TRADEMARK OFFICE



| | States | Events | | | | | |
|---|---|---|---|---|---|---|---|
| | ST = State Transition | Start | Receive a call | Receive Valid Input | Receive Invalid Input | Timeout | Max Retries Reached |
| | Fax Callout | | | | | | |
| 317 | MakeTheCall | Call FaxNumber ST: CallAnalysis | N/A | N/A | N/A | N/A | N/A |
| 318 | CallAnalysis | Determine if Fax Answered | N/A | Fax Answered ST: FaxSend | Fax did not Answer ST: Hangup | N/A | N/A |
| 319 | FaxSend | Send Fax ST: End | | | | | |
| 320 | ErrorState | Play standard error message; ST: Goodbye | N/A | N/A | N/A | N/A | N/A |
| 321 | Goodbye | Thank substitute using system; ST: Hangup: | N/A | N/A | N/A | N/A | N/A |
| 322 | Hangup | Hangup Phone ST: End | N/A | N/A | N/A | N/A | N/A |

FIG. 13E

OIPE
SEP 26 2003
PATENT & TRADEMARK OFFICE



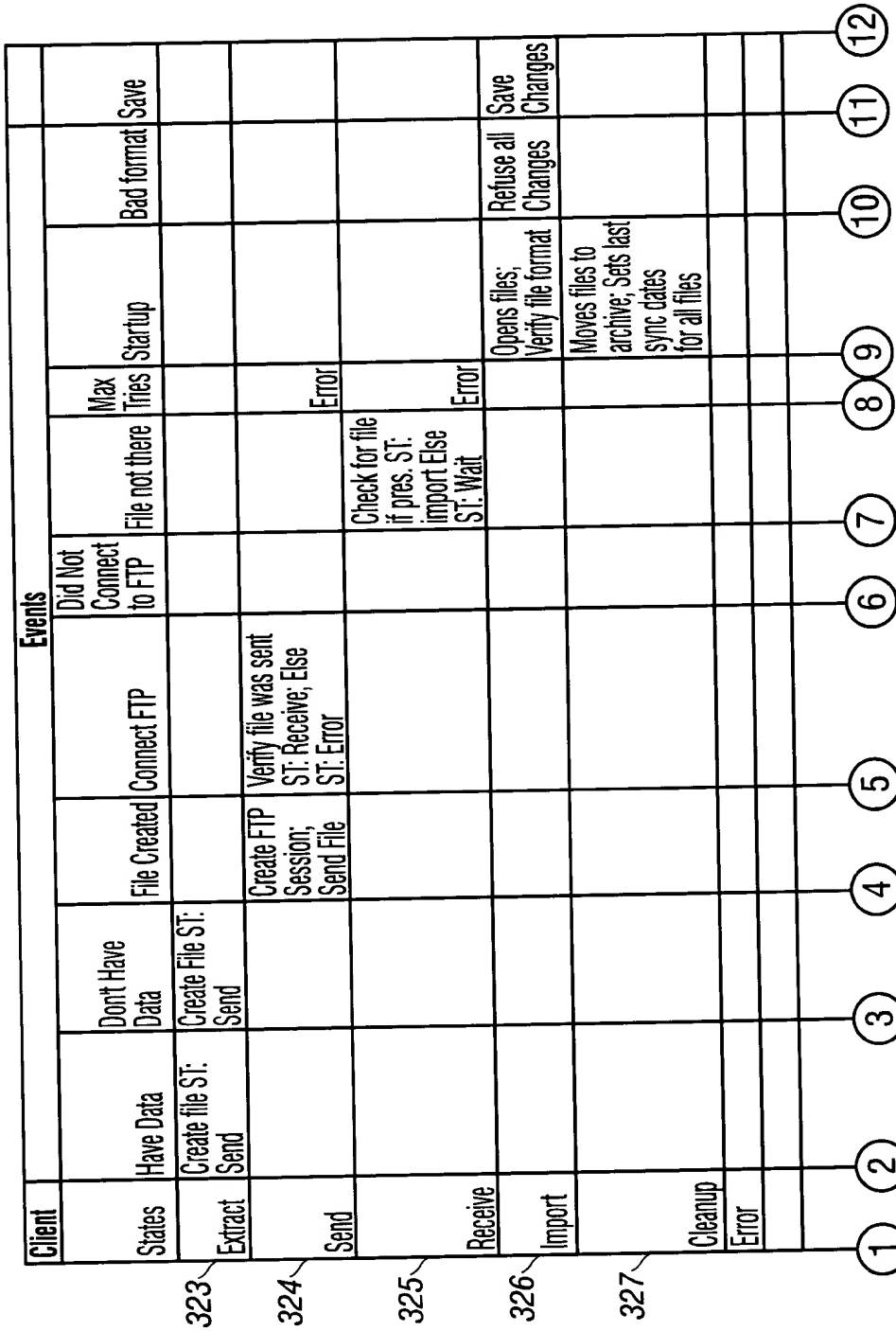


FIG. 13F ( 1 of 2 )

OIPE
SEP 26 2003
PATENT & TRADEMARK OFF



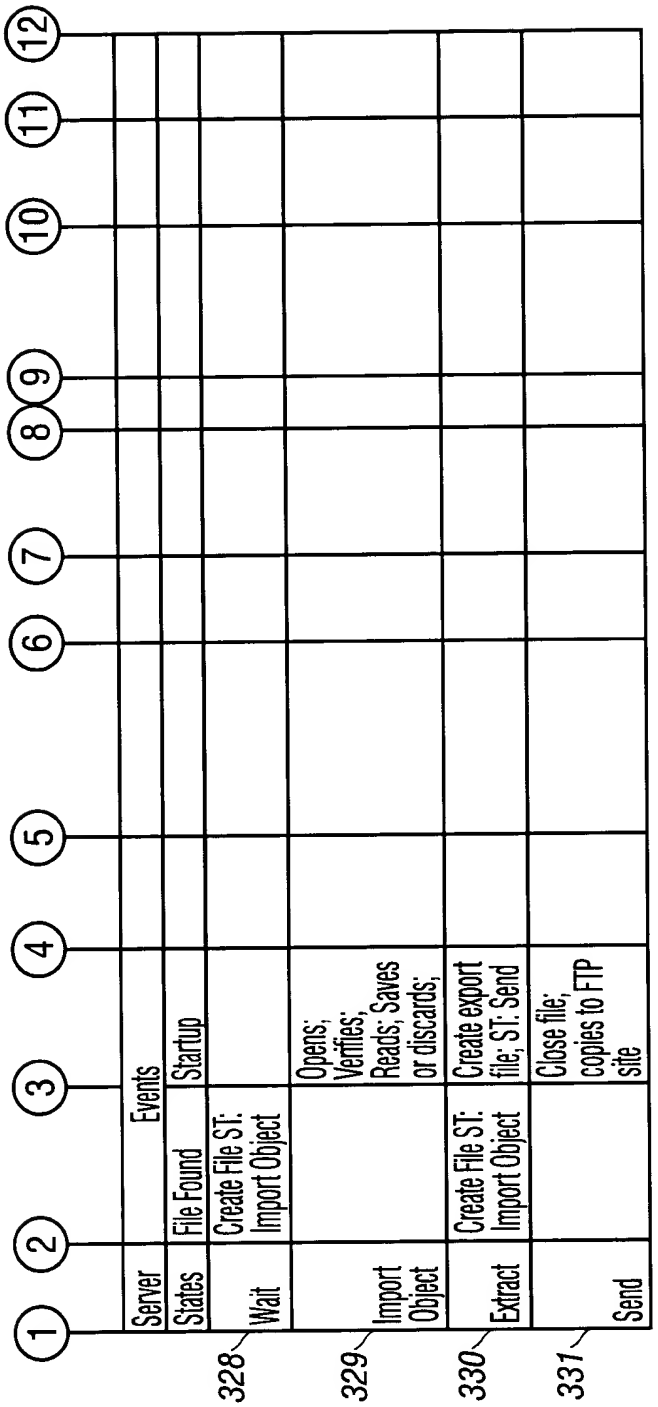


FIG. 13F ( 2 of 2 )

OIPE SEP 26 2003 PATENT & TRADEMARK OFFICE



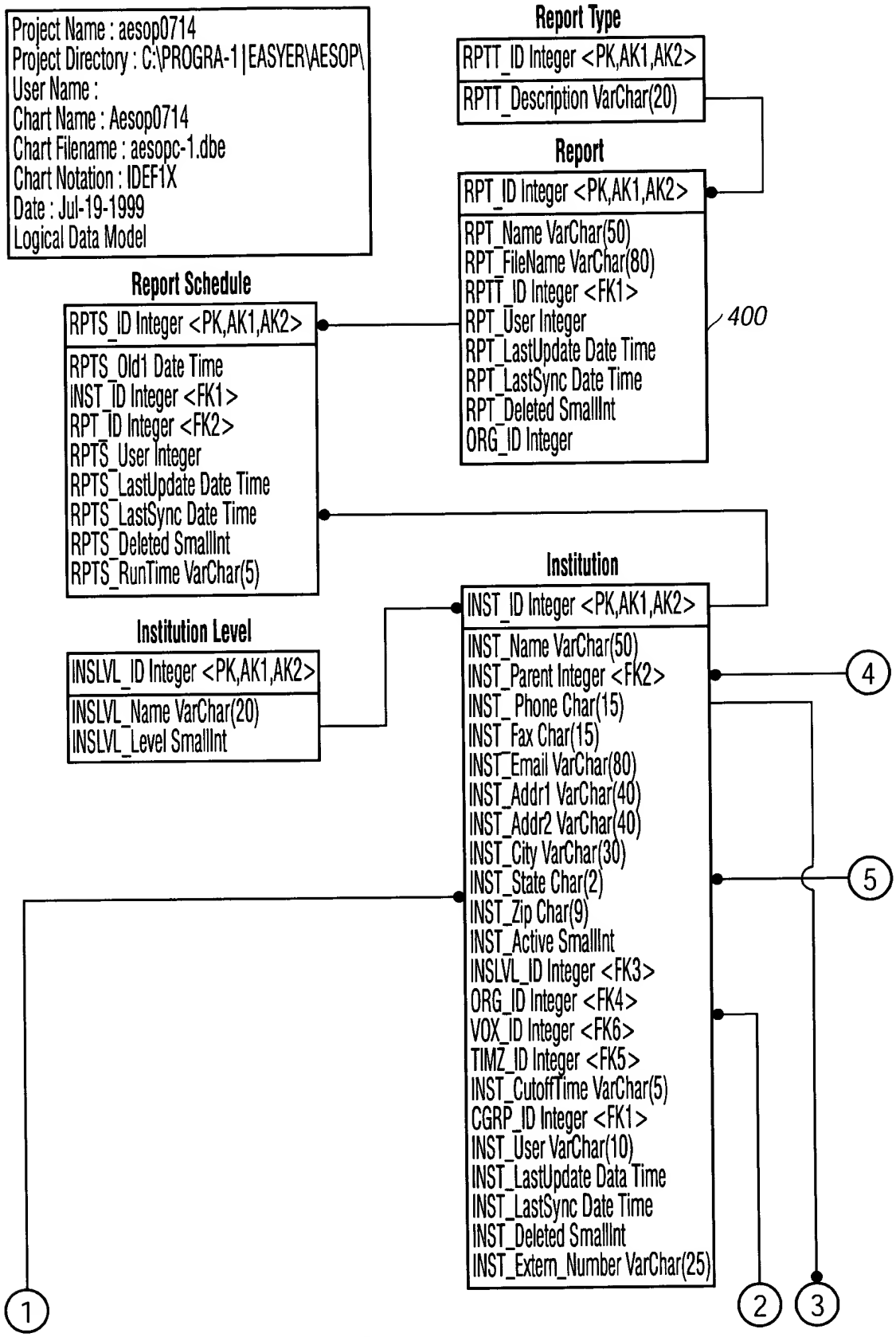


FIG 14 ( 1 of 10 )

OIPE JC
SEP 26 2003
PATENT & TRADEMARK OFFICE



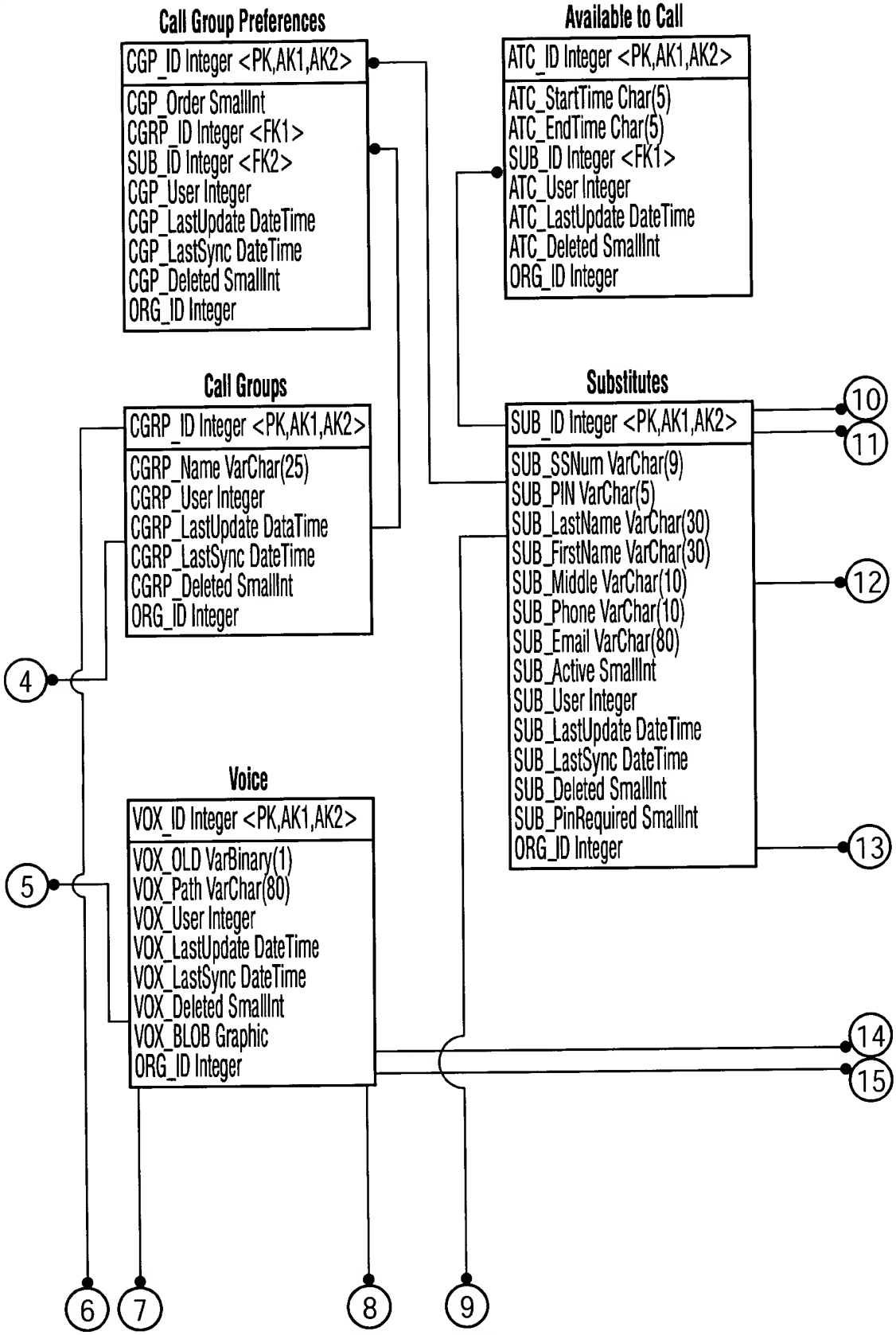


FIG 14 ( 2 of 10 )

SEP 26 2003
PATENT & TRADEMARK OFFICE



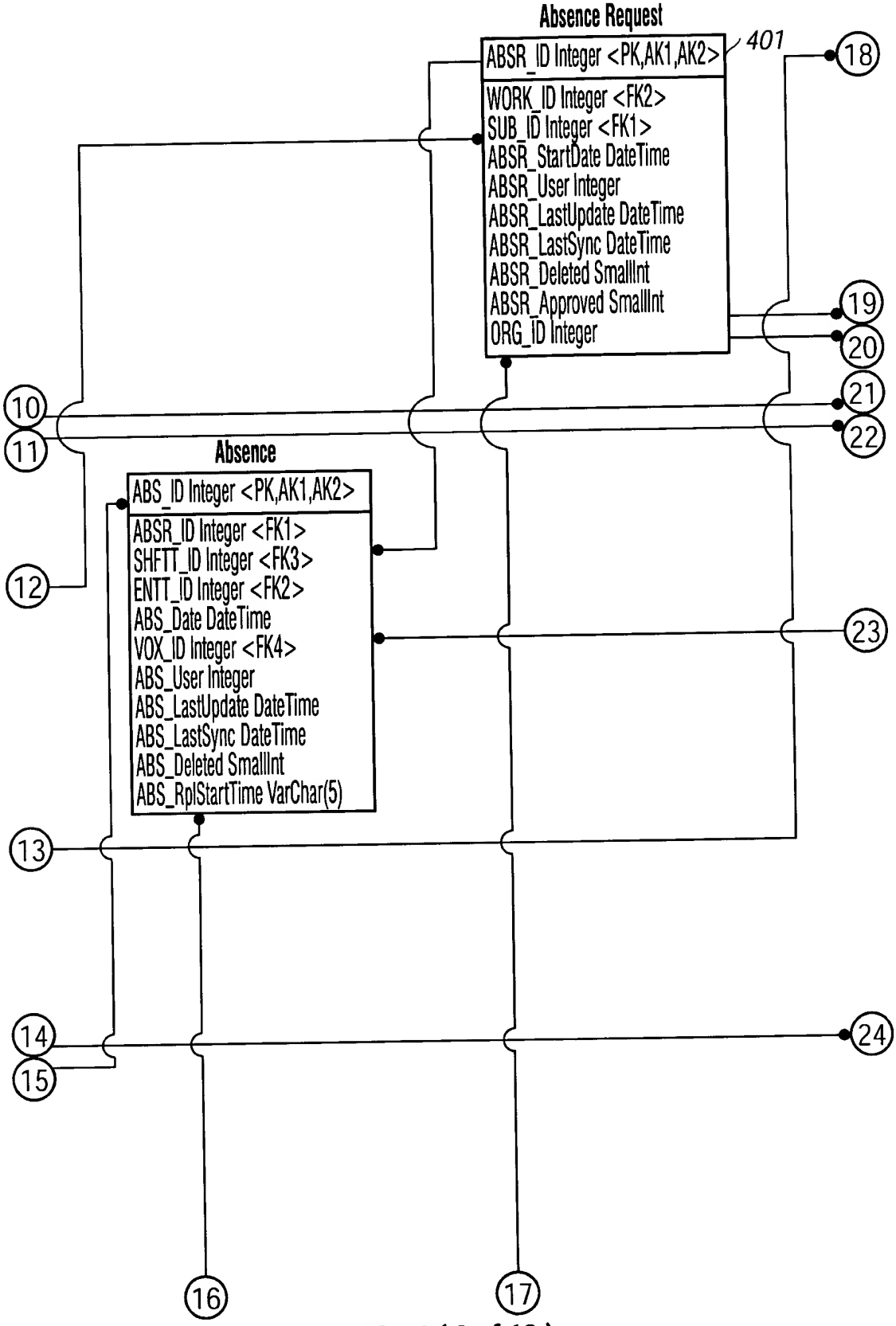


FIG 14 ( 3 of 10 )

OIPE SEP 26 2003 PATENT & TRADEMARK



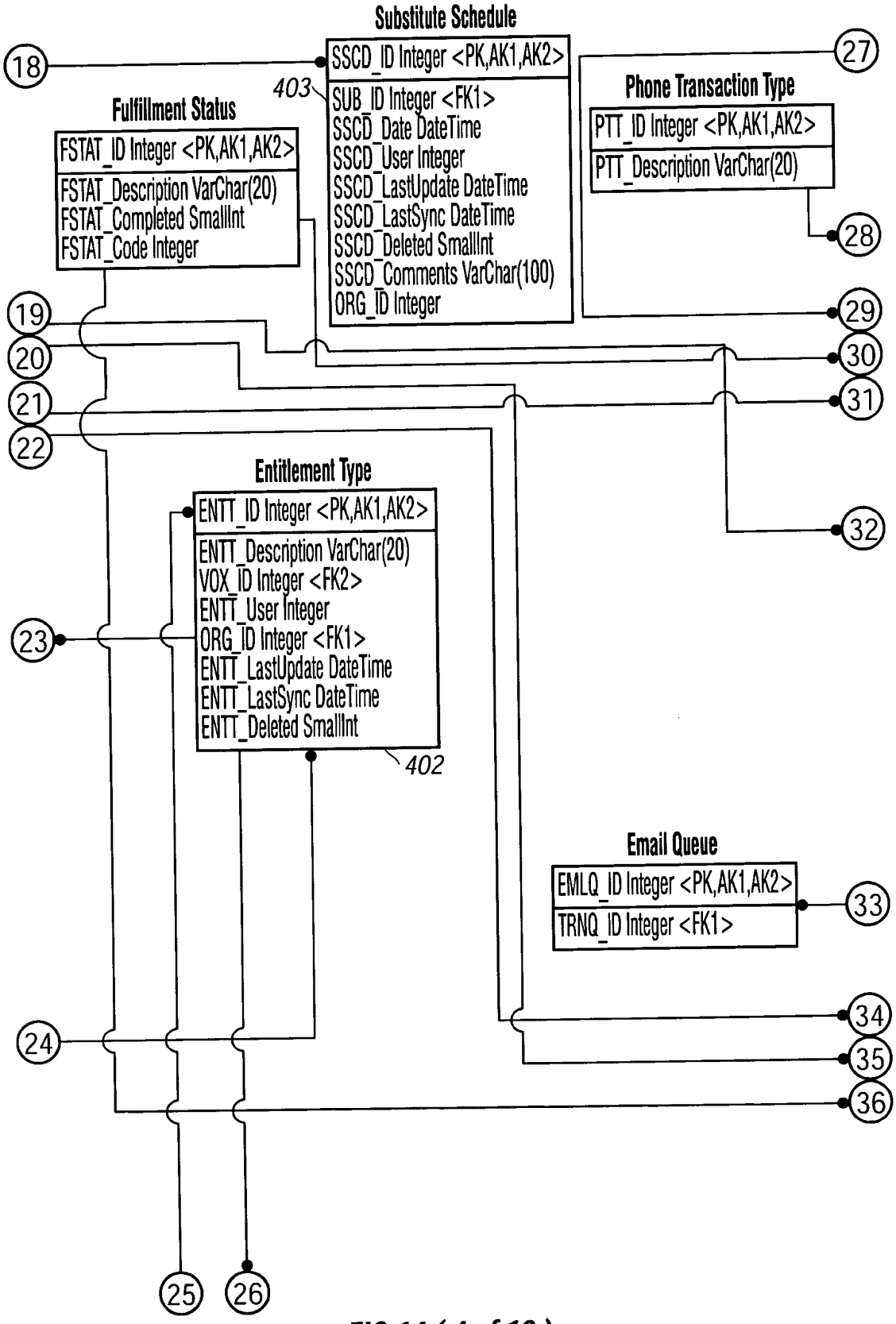


FIG 14 ( 4 of 10 )

SEP 26 2003
PATENT & TRADEMARK OFFICE



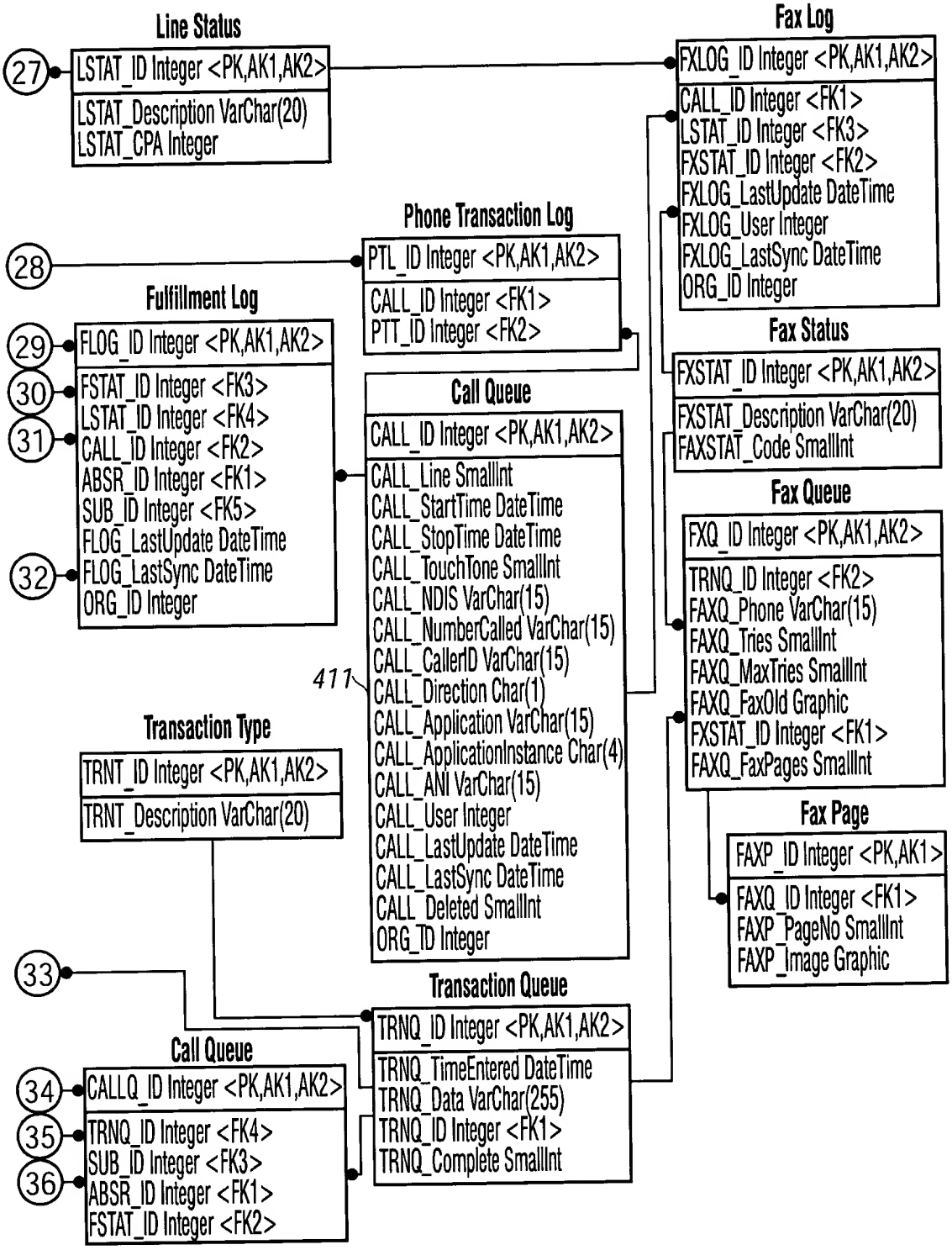


FIG 14 ( 5 of 10 )

OIPE SEP 26 2008 PATENT & TRADEMARK OFFICE



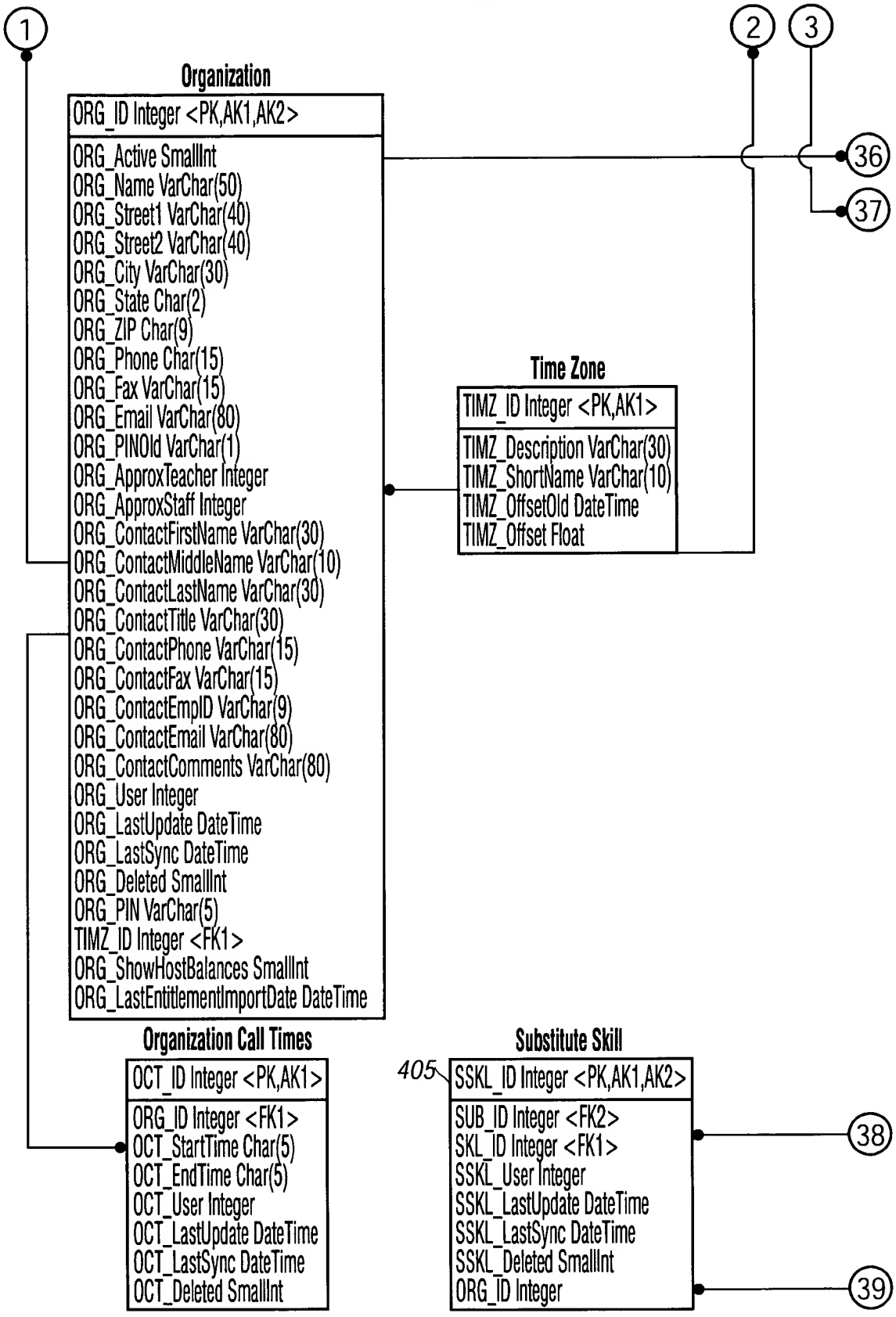


FIG 14 ( 6 of 10 )

OIPE
SEP 26 2003
PATENT & TRADEMARK OFFICE



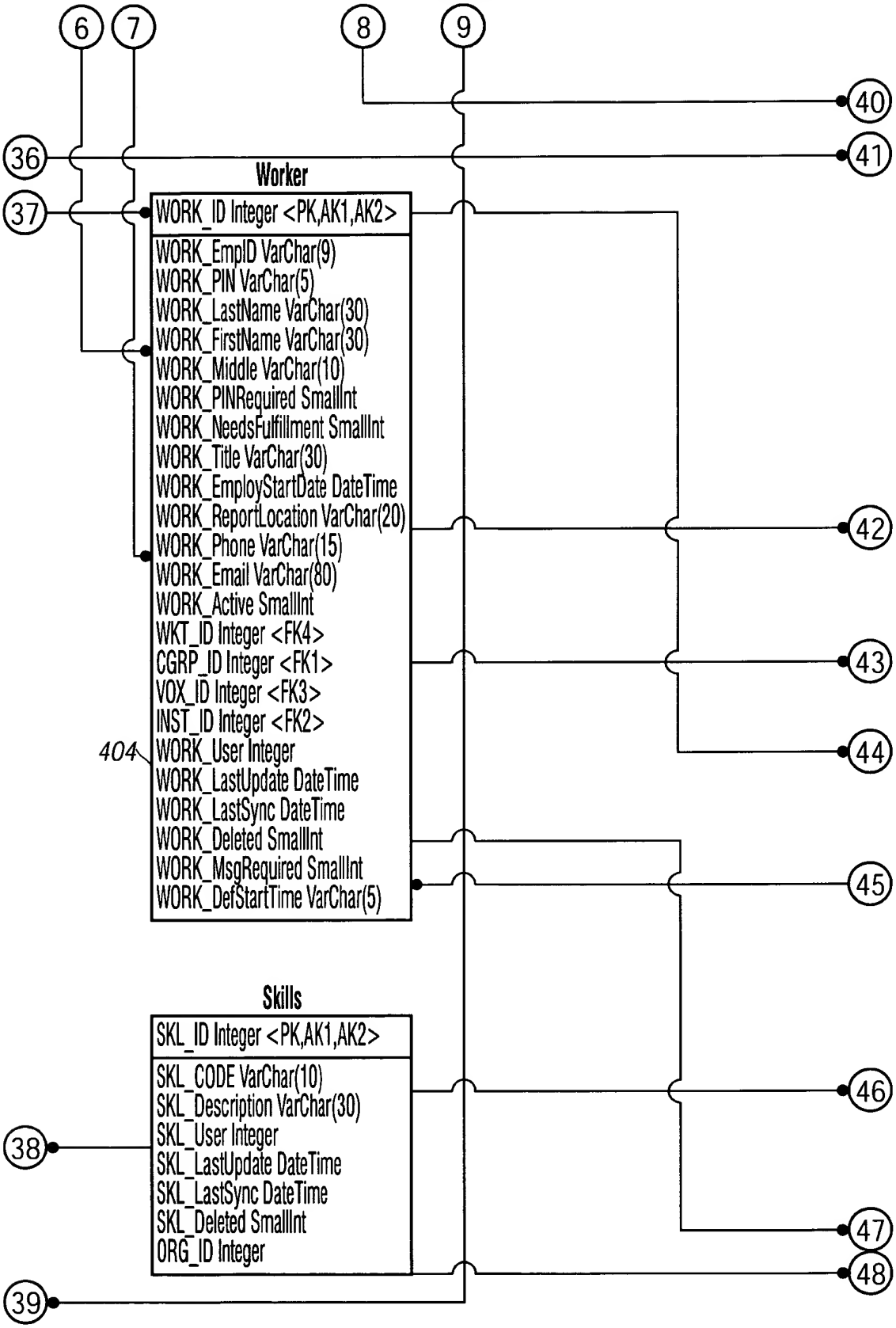


FIG 14 ( 7 of 10 )

USPTO
SEP 26 2008
PATENT & TRADEMARK OFFICE



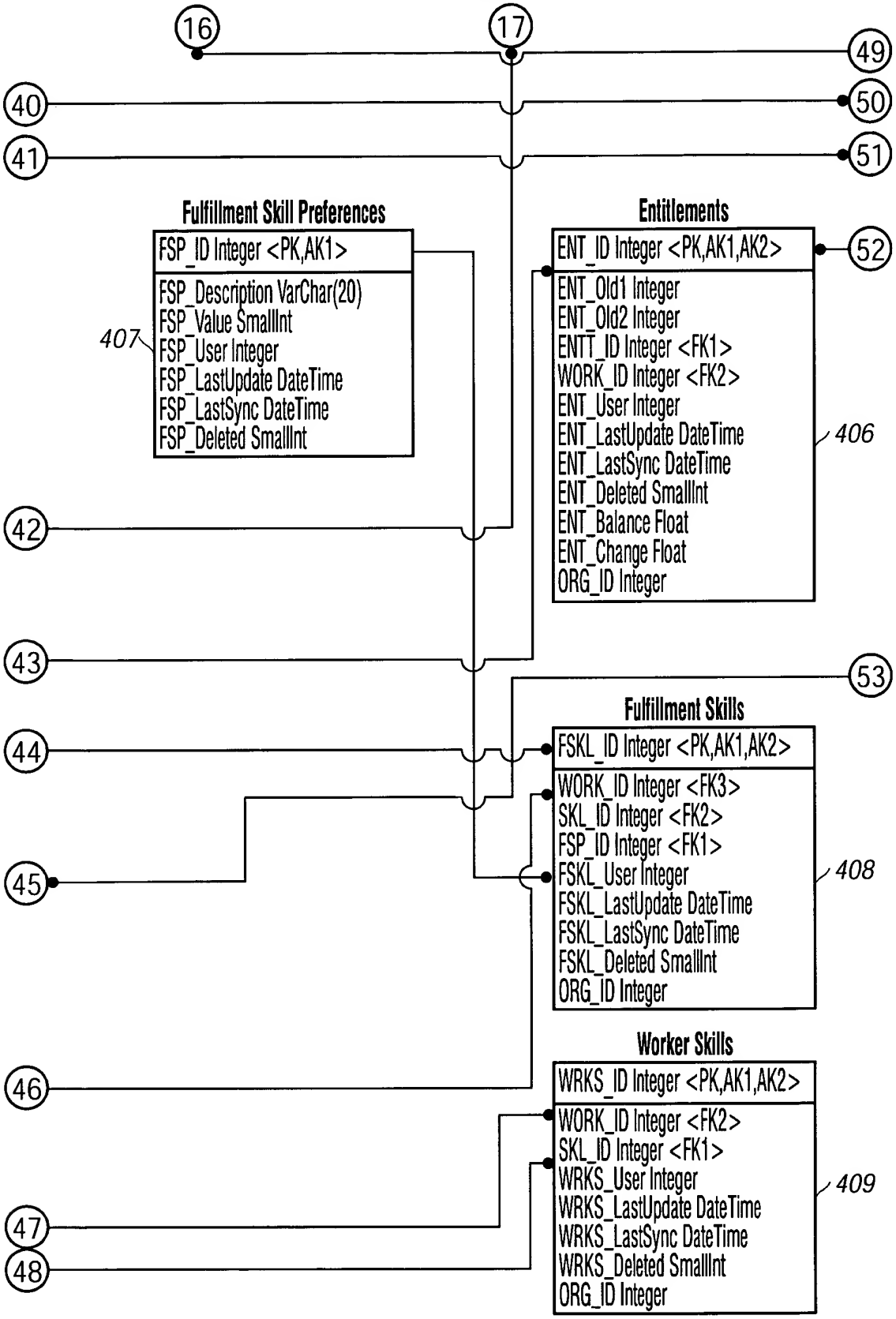


FIG 14 ( 8 of 10 )

SEP 26 2008
PATENT & TRADEMARK OFFICE



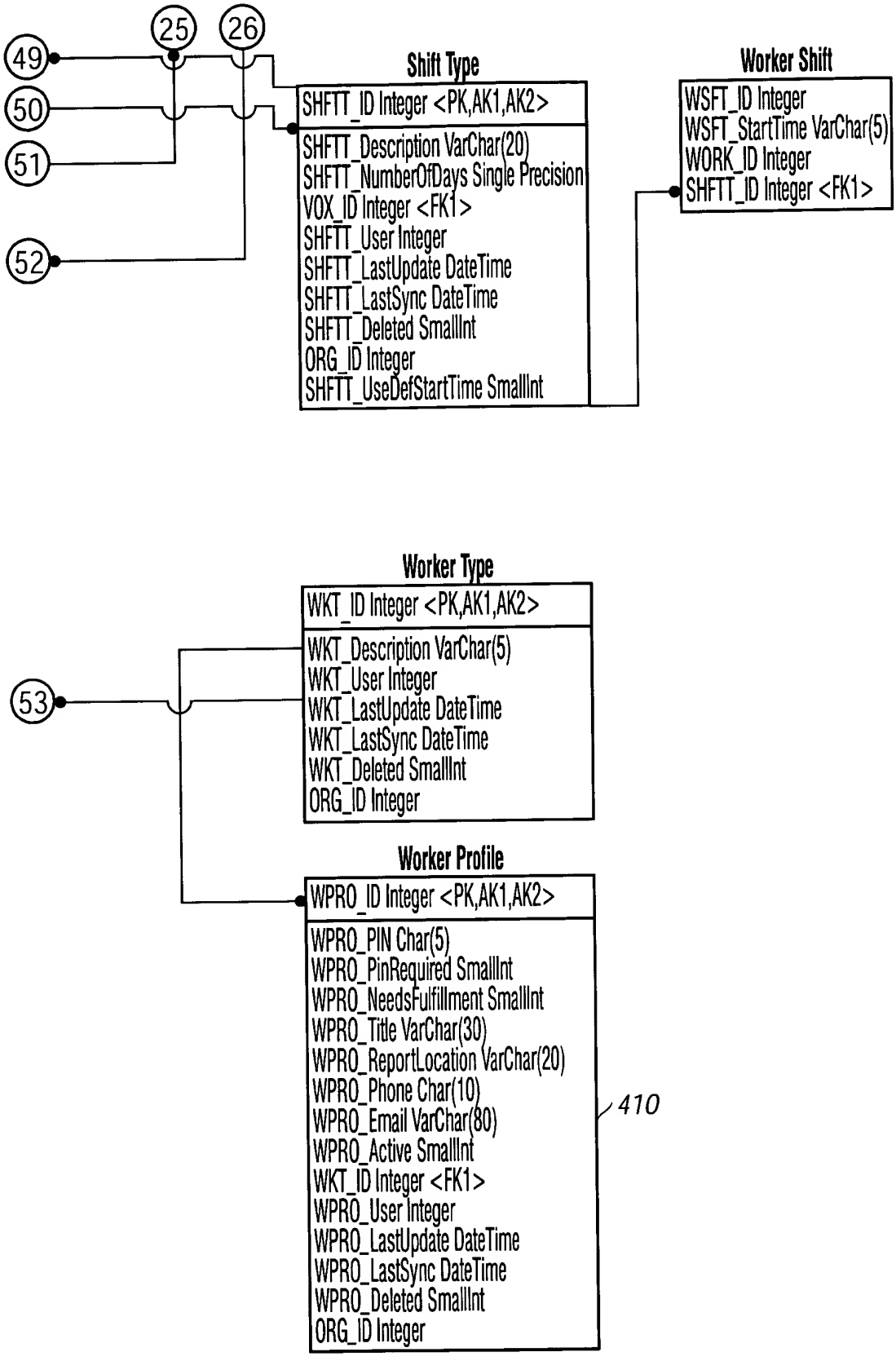


FIG 14 ( 9 of 10 )

SEP 2 6 2003
TRADEMARK OFFICE



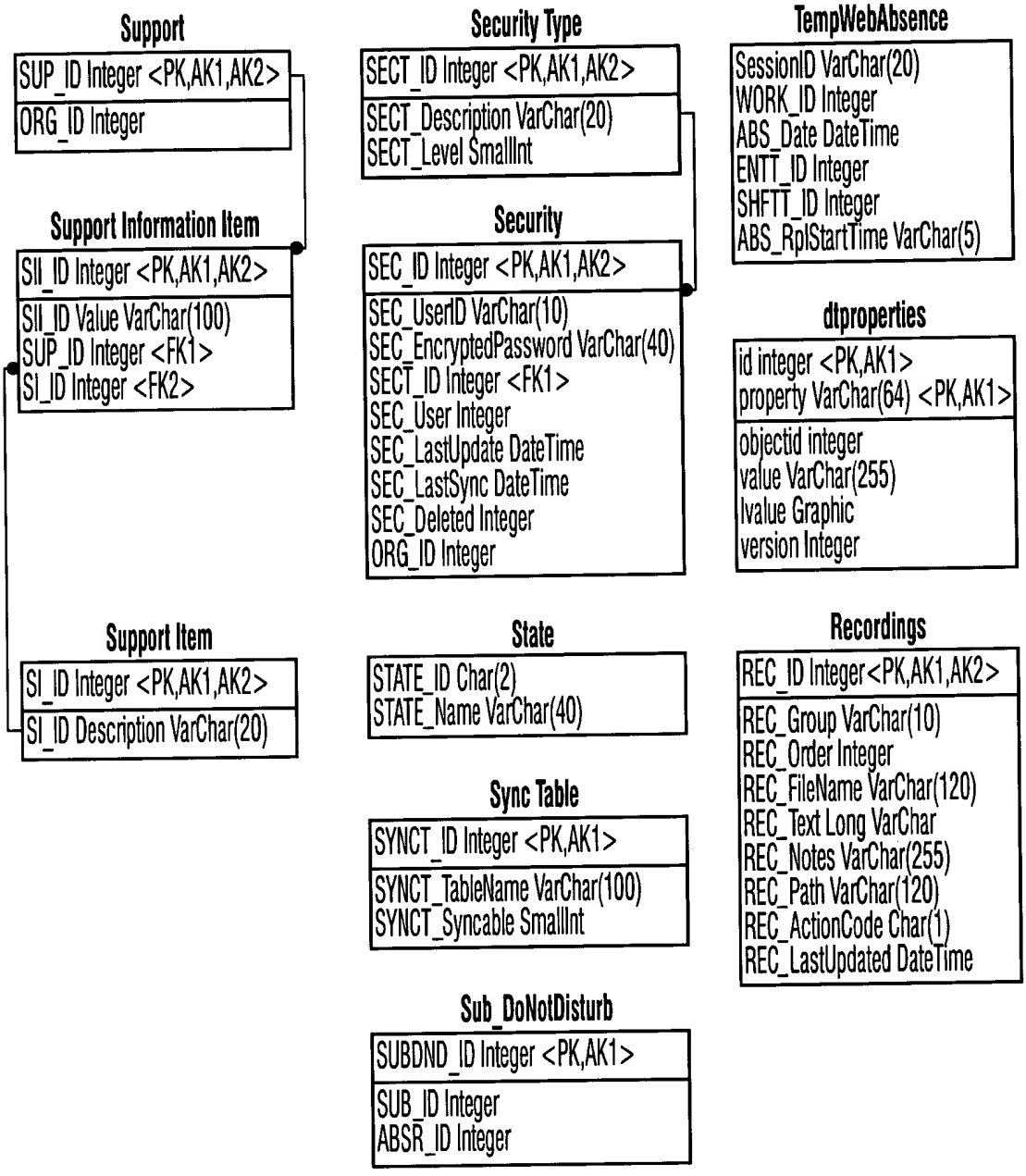


FIG 14 ( 10 of 10 )